



September 21, 2005

To: Mr. Noah C. Hawk, Art Unit: 3637

From: Michael A. Zerillo

Subject: Application Number 10/737,330

Response to Detailed Action paragraphs in Office Action Summary – 5 sheets.

1. Information Disclosure Statement

Rejection: References not submitted in a separate paper.

Response: References cited in amended Form PTO-892.

2. Drawings

Objection: Drawings not consistent with Claims.

Response: Claims amended in attached. Original Drawings remain.

3. & 4. Claim Rejections – 35 USC 112

Rejection: In the Claims, insufficient antecedent basis, and incorrect switch description.

Response: Amend Claims to add required antecedent, and correct the switch description.

5. & 6. Claim Rejections – 35 USC 103

Rejection: Claims unpatentable over Lai and Small patents.

Response: Amend Claims.

Narrative Response: The following Narrative distinctly and specifically points out the differences between Application 10/737,330 and the patents referenced in the Office Action Summary. The Narrative shows how the subject Application is unique in the patent art.

Narrative:

Patent application 10/737,330 is unique in the following ways.

1. Application 10/737,330 reveals a retrofit device. In paragraph (0004), it makes a distinction between retrofit and factory equipped devices by stating . . . “motorized patio umbrellas are only available as a factory equipped mechanism constructed by patio umbrella manufacturers”. Paragraph (0007) states . . . “An additional object of the present invention is to provide a retrofit motor and control means that an average person can easily install to a conventional patio umbrella with little or no modification to the umbrella”. Paragraph (0014) outlines the embodiment of the invention and states . . . “designed for do-it-yourself installation and usually the only tool required is a screwdriver”. Finally, in Fig. 1 of the drawing sheet, it is obvious that the device is intended to retrofit to any patio umbrella.

However, the device revealed in Lai in US Patent 6182917 is not a retrofit device. The Lai device describes a factory-equipped mechanism constructed by patio umbrella manufacturers. The Lai device claims . . . “a transmission shaft being passed through an inner tube seat”. The text “inner tube seat” clearly indicates a manufactured device that must be purchased as a unit. Further, Lai claims . . . “a damper mechanism including a pad sleeve, a washer, a ratchet gear, a spring, a check gasket and tightening nut, a rear end of the transmission shaft being passed through the tube seat and then sequentially passed through the respective components of the damper mechanism and finally tightened by the tightening nut”. This claim describes a complex machine assembly in “the tube seat” All Lai specifications, claims and drawings reveal a manufactured device. The Lai device cannot be retrofit because it has no means for which a person with ordinary skill can attach it to a patio umbrella.

With regards to Small in US Patent 2951492 and 2960094 in the Office Action Summary, the above Lai analysis also applies. In Small’s specifications and Drawings Figure 2, a switch is revealed mounted on the interior of the umbrella tube (mast), a motor is riveted to the umbrella tube and the motor drives a gear and spring mounted crank mechanism. This device could not be attached to an existing patio umbrella by a person with ordinary skill. Small’s device is clearly a manufactured system.

In conclusion, the device in application 10/737,330 is unique. In the original Claims, it specifically claimed to be a retrofit device stating . . . “An electric opening and closing device

that retrofits to new and existing patio umbrellas . . .” The inventor repeatedly describes the device as “retrofit”, “designed for do-it-yourself installation”, “an average person can easily install to a conventional patio umbrella with little or no modification to the umbrella”. The inventor’s intent is to reveal an aftermarket product. Therefore, it does not interfere with Lai or Small, and is therefore patentable over Lai and Small.

2. The device revealed in Application 10/737,330 describes the three principle opening and closing means of patio umbrellas, and claims a device that can retrofit and control all such opening and closing means. Paragraph (0002) states . . . “operating means of patio umbrellas vary in configuration . . .” Examples are provided such as . . . “a mechanism comprising a hand operated winch . . .”, and “one or more hand operated ropes over pulleys . . .” and . . . “manual hand lifting and lowering . . .” In paragraph (0002) of Application 10/737,330 it is revealed that all patio umbrellas possess a common opening and closing means for which this device is intended. Specifically . . . “The yoke forms a ring applied on the circumference of the mast and is movable along a portion of the length of the mast” . . . “causing the canopy to open and close”. In paragraph (0016), it describes how to install the device . . . “Attach the opposite end of cable 18 to yoke 19 . . .” “Thereby yoke 19 is drivingly engaged with motor 26 . . .” This is also illustrated in Drawings Figures 1 and 2. The intent of the present invention is to provide a retrofit device that can control all principle opening and closing means described for patio umbrellas.

However, Lai and Small describe a device that is driving engaged with the patio umbrella cable winch mechanism. The Lai and Small devices are not drivingly engaged with “yoke 19” as detailed in Application 10/737,330. This is an important distinction because a person with ordinary skill can easily retrofit the Application 10/737,330 device to “yoke 19”, and by so doing can add a control device “causing the canopy to open and close”. The device provides a substitute opening and closing means for all types of patio umbrellas. However, in Lai and Small, the proposed opening and closing means is a modification to the existing cable winch mechanism, and the components are not easily accessible to a person with ordinary skill. Such modification can only be done by the original equipment manufacturer.

In conclusion Lai, Small, and all others in prior patent art reveal a manufactured patio umbrella with built-in motor means. However, Application 10/737,330 reveals an aftermarket device that provides a replacement means to open and close any patio umbrella regardless of their opening and closing means. No other prior patent art discloses or claims these unique features.

3. In Moga pending Application 2004/0055627, Claim 1 states . . . “An umbrella combination comprising: a) an umbrella having an open position and a closed position; b) a stand adapted to support said umbrella; c) an electric motor adapted to move said umbrella between said positions . . .” This is not a patentable device because it is already in the public domain. An identical product has existed in the market for years. Reference the following Internet webpage to view the public domain item.

http://www.outdoorpatioumbrellas.com/ecom/stores_app/Browse_Item_Details.asp?Shopper_id=3306920150333306&Store_id=188&page_id=23&Item_ID=1046

Conclusion; Application 10/737,330 is not diminished by Moga.

4. In Ma pending Application 2004/0040591, the specification and claims describe a complex mechanism that requires manufacturing. It is not a retrofit device that a person with ordinary skill can install and use. Ma does not claim retrofit, aftermarket, or kit attributes of the device.

Conclusion; Application 10/737,330 is not diminished by Ma.

5. In Kuelbs pending Application 2004/0149325, paragraph [0011] states . . . “The above objects are achieved, for example, by integrating a rechargeable power system, a lighting system, a motorized retraction system, and/or a cooling system into a relatively large patio umbrella.” I direct your attention to the word “integrating”. Paragraph [0032] states . . . “Motor 49 is preferably disposed within the hollow interior of pole portion 15 and is coupled to gear and pulley system 43”. Throughout the text, Kuelbs continually restates . . . ‘Motor is preferably disposed within the hollow interior of pole portion’. This is clearly a manufactured device. It is not a retrofit device that a person with ordinary skill can install and use. Nowhere

in Kuelbs does he claim retrofit, aftermarket, or kit attributes of the device. Furthermore, Kuelbs filed on August 5, 2004, eight months after my Application 10/737,330.

Conclusion; Application 10/737,330 is not diminished by Kuelbs.

6. In Vivian pending Application 2005/0072451 the device is similar in some respects to Application 10/737,330. The Summary Of The Invention states . . . “retrofitted to existing patio umbrellas” and later . . . “an aftermarket accessory”. However, it does not specifically claim these features in the Claims section. If Vivian intended the device to be retrofit, Vivian should have stated this in the Claims. Furthermore, Vivian filed on April 7, 2005, sixteen months after my Application 10/737,330.

Conclusion; Vivian interferes with Application 10/737,330.

Narrative Summary

Application 10/737,330 reveals the first embodiment of a retrofit device for new and existing patio umbrellas that a person with ordinary skill can install and use. It is the only application that repeatedly claims its retrofit nature. In amended Claims it states . . . “A retrofit electric opening and closing device that attaches to new and existing patio umbrellas, whereby the patio umbrellas have an opening and closing means, whereby a person with ordinary skill can attach the device to the opening and closing means of the patio umbrellas with little or no modification, whereby the device drivingly engages the opening and closing means of the patio umbrellas . . .” and . . . “causing the patio umbrellas to open . . .” and . . . “causing the patio umbrellas to close . . .” Throughout the application the inventor makes continuous claims that the device is for control of “. . . existing patio umbrellas. . .”. This is a clear indication of the unique retrofit nature of the device. No other prior patent art reveals this important feature. It is obvious that the inventor intended the device to be a retrofittable control for any patio umbrella regardless of its opening and closing means. Application 10/737,330 is novel and deserves a patent.